

R E M A R K S

Claims 12-14, 17-22 and 25-29 are presented for reconsideration.

In the Office Action, the drawings were objected to for not showing the electron transport layer recited in claims 20 and 28; claims 11-15, 17-23 and 25-28 were rejected under 35 USC 102 as being anticipated by EP 0869701 to Kanai et al; claims 16 and 24 were rejected under 35 USC 103 as being unpatentable over EP 0869701.

With regard to the drawing corrections, attached herewith is a Letter to the Official Draftsperson presenting a single sheet of drawings containing Figs. 1 and 2, which has the legend "Prior Art" added to Fig. 1 and which has a layer 29, which is the electron transport layer, arranged on at least one organic function layer, as recited in claims 20 and 28, and between the uppermost function layer and the charge carrier injection layer, such as discussed on page 6, lines 12-15 of the Substitute Specification. Thus, it is submitted that the corrected Fig. 2 does not involve any new matter and was originally disclosed by the claims and specification, as originally filed.

By this amendment, independent claim 11 has been cancelled and a new independent claim 29 has been added, which recites a transparent bottom electrode arranged on the substrate, a top electrode composed of metal that is inert to oxygen and moisture, at least one organic function layer arranged between the bottom electrode and the top electrode and a charge carrier injection layer containing a complex metal salt which is selected from LiAlF₄, LiAgF₂, LiBaF₃, NaAgF₂, KAgF₂, LiMgF₃, LiCaF₃, CaAgF₃ and MgBaF₄. In view of the language of claim 29, claims 12, 17, 21, 22, 25, 27 and 28 have been amended to be dependent on the newly-presented independent claim 29 and claims 15, 16, 23 and 24 have been cancelled.

The nine specific salts recited in claim 29 are disclosed on page 7, lines 7-9 of the Substitute Specification.

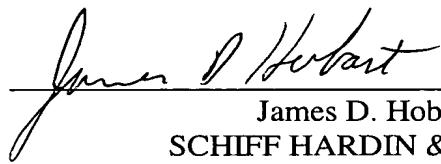
It is noted that when rejecting original claims 16 and 24, the Examiner admitted that Kanai et al did not disclose LiAlF₄ as a complex metal salt, but contends that since the reference disclosed Li₃AlF₆, it would be obvious for one of ordinary skill in the art at the time the invention was made to use the recited salt instead of the one disclosed in the

reference, because both are known to be equivalent in the art for their use. It is noted that the Examiner provided no evidence to support this conclusion. It is also noted that none of the references cited by the Examiner teach or suggest the nine salts now recited in claim 29. Moreover, organic electroluminescent components of the invention also involve the inventive step in comparison to Kanai et al. LiAlF₄, which is recited in claim 29, differs in structure from the complex metal salt Li₃AlF₆, which is mentioned in the prior art document. The complex salt LiAlF₄ shows a tetrahedral coordination of four fluorine atoms around one aluminum central atom, whereas the complex Li₃AlF₆ exhibits an octahedral coordination of six fluorine atoms around one aluminum central atom. These different coordinations result in different electronic features of both complex metal salts. Therefore, both complex metal salts are not known to be equivalent in the art for their use. In contrast to that, an expert in the field of OLED devices has to adapt the complex metal salt of the charge carrier injection layers to the composition of the top electrode to achieve a maximum performance of the device. Therefore, it is not obvious to someone of ordinary skill in the art that LiAlF₄ can also be used instead of Li₃AlF₆. In addition, an advantage of LiAlF₄ is that it is much easier and cheaper to synthesize than Li₃AlF₆, which can only be synthesized from molten metal salts at around 800°C. For the above reasons, it is not obvious to a person of ordinary skill in the art to use any of the other complex metal salts mentioned in independent claim 29.

For these reasons, it is respectfully submitted that independent claim 29 is clearly unobvious to a person of ordinary skill in the art and, therefore, is patentable over the references of record. Since dependent claims 12-14, 17-22 and 25-28 are dependent on newly-presented independent claim 29 or a claim which, in turn, is dependent on claim 29, these claims are allowable for the same reasons that claim 29 is allowable over the art of record.

In view of the amendments and explanations contained hereinabove, it is respectfully submitted that this application is now in condition for immediate formal allowance and further reconsideration to that end is earnestly solicited.

Respectfully submitted,



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Signature

July 10, 2003

Date